

The New Star in Auriga. By George Knott, B.A., LL.B.

The following observations of the new star in *Auriga* form a continuation of the series in the March number of the *Monthly Notices*. The magnitudes were either gauged directly by the method of limiting apertures, or estimated by comparison with stars the magnitudes of which had been so gauged:—

	Mar. 12	^m 7.0		Apr. 1	^m 13.4
	14	7.7		2	13.5
	18	8.9		3	13.5
	19	9.1			
	25	11.6			
	28	12.2			
	30	13.0			
	31	13.3			

As the star decreased in brightness its colour seemed to deepen slightly to a ruddy orange. On March 18 the F line in the spectrum was still bright and well seen, but I felt doubtful as to other lines. I thought it probable that as the light of the new star faded I should find that I had underestimated the magnitude of the 11 mag. star referred to, with measures, in my former paper. This has proved to be the case. From several determinations I find 10.6 as this star's probable magnitude. The star D.M. +30° 924 I have observed to be 10.5 mag., a magnitude fainter than the D.M. estimate. This star is preceded 10^s, 3's., by a rather brighter star of about 10.3 magnitude.

I give below a list of approximate places for 1892.0 of some small stars in the near neighbourhood of the new star. As most of the stars are faint, the places given are only rough approximations. In the list the new star is marked "var."

Mag.	R.A.	Decl.
	^h ^m ^s	[°] ['] ^{''}
13.3	5 25 0	+ 30 22.4
var.	25 3	21.8
10.6	25 6	23.0
13.4	25 6	20.1
13.6	25 9	23.1
11.9	25 13	20.0
12.2	25 16	20.1

If the places of the stars in the above list are roughly charted, and compared with the sky, there will, I think, be no difficulty

in their identification. I hope that the magnitudes of the stars will be found to be fairly correct. Unfavourable weather, and the presence of the Moon, have at times made observation difficult.

Knowles Lodge, Cuckfield :
1892 April 6.

Anderson's New Star in Auriga. By S. W. Burnham.

My observations of the new star which has recently appeared near 26 *Aurigæ* are confined to micrometrical measures of its position with reference to the faint stars in the field with it. The 36-inch refractor has been used, and I have measured all the stars within a radius of 2' which could be seen with that aperture. Some moderately bright stars with greater distances have been measured, but without attempting to include all the outlying stars which could be seen.

The following are the measures:—

A and B.

1892·115	81°6	32"98	5·7 . . .	14·5	4·30
·118	84·1	33·21	. . .	15·5	6·30
·151	84·7	33·41	. . .	14·5	6·35
1892·14	83·5	33·20		14·8	

A and C.

1892·151	152°0	49"54	. . .	15	6·15
·153	153·7	48·57	. . .	15·5	9·10
1892·15	152·8	49·05		15·2	

A and D.

1892·151	170°8	66"07	. . .	15	6·10
·153	170·0	66·64	. . .	15	9·15
1892·15	170·4	66·35		15	

A and E.

1892·115	323°3	74"44	. . .	11·5	4·35
·118	323·9	74·30	. . .	12	6·35
·151	323·6	74·22	. . .	11·5	6·45
1892·14	323·6	74·24		11·7	